

REMARKS / ARGUMENTS

**A. Pending claims.**

Claims 1-23 are pending in this application. Claims 1 and 8 were previously amended. However, claim 1 was inadvertently copied with missing limitations (identified by the examiner as claim elements e and f). Applicant has amended claim 1 to reflect the reinstatement of these limitations. Claims 4, 5, 11, 12, 16, 20 and 21 are also currently amended.

For clarity purposes, Applicant has mapped the limitations of the examined claims to the references cited by the examiner:

**B. The Underlying Chen and Safadi References**

Claims 1-23 of the present invention have been rejected under 35 U.S.C. §103(a) as being unpatentable over Chen, "SP-to-SP Service Ordering Specification and Its Implementation" (herein, "Chen") in view of U.S. Patent 5,847,751 issued to Safadi (herein, "Safadi").

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. (MPEP. §2142 (8<sup>th</sup> Ed, Rev. 1)). The references and the applicant's disclosure must be considered as a whole. (MPEP §2142.02 (8<sup>th</sup> Ed., Rev. 1)).

Applicant has previously presented arguments that the cited references do not make out a prima facie case of obviousness. (See, Response to the Office Action of March 13, 2003, filed September 12, 2003 and Response to Office Action of October 14, 2003, filed April 14, 2004.) These responses are incorporated by reference herein in their entirety.

The present invention is directed to the problem encountered by integrated communication carriers (ICPs) in selecting an optimal mix of on-net and off-net resources for a

particular customer. Manual selection of the optimal mix is expensive and prone to errors. The present invention teaches automatic means of selecting the optimal mix of components to fulfill a customer's service requirements.

By contrast, Safadi is directed to solving the problem of how to upgrade existing cable systems to provide data services in a cost efficient manner. Safadi describes a network architecture for delivery of broadcast and interactive digital services over a hybrid fiber-coax distribution system. Applicant submits that the Safadi reference is directed to the art of delivering digital services, not ordering them, and is, therefore, non-analogous art.

Because the Safadi invention is directed to solving an entirely different problem from that solved by the present invention, the Safadi reference would not have been considered by a person having ordinary skill in the art faced with the problem defined by the present invention. Network architecture is not reasonably pertinent to automating the selection of on-net and off-net communication services, the problem with which Applicant was concerned. See *In re Oetiker*, 977 F.2d 1443, 24 U.S.P.Q.2d 1443 (Fed. Cir. 1992). See also *In re Clay*, 966 F.2d 656, 23 U.S.P.Q.2d 1058 (Fed. Cir. 1992) and *In re Deminski*, 796 F.2d 436, 230 U.S.P.Q. 313 (Fed. Cir. 1986). Thus, because of its distinct art and its distinct problem solving focus, Safadi is non-analogous.

Further, even if Safadi were found to be analogous art, there is no motivation to combine Chen and Safadi. Chen purports to describe a service ordering process for telecommunications services while the Safadi reference is directed to the art of delivering digital services. For these reasons, Applicant respectfully submits that prior art combination of Chen and Safadi fails to establish a prima facie case of obviousness.

Regarding the Chen reference, the authors of that paper make clear that they are presenting an "overview analysis for the service ordering process" of a larger service management function. Service management is described as comprising performance management, fault management, billing and service provisioning. These latter functions, some of which are performed by embodiments of the present invention, are not enabled by the Chen reference. For example, Chen does not present an enabled disclosure of a pre-order management component that retrieves customer service records, parses them, and prepares reports. Chen does not present and an enabled service management component for creating and tracking work plans

comprising installation or troubleshooting of a telecommunication server provided to a customer. While a conclusory statement is offered intimating that performance management, fault management, billing and service provisioning are desirable, Chen does not provide sufficient direction to one skilled in the art as to how these tasks are to be reduced to practice. Chen, by its own admission, is limited in scope to describing an interface means to allow parties engage in a transaction for the provision of telecommunications services.

While the examiner repeatedly sites Chen as disclosing an end-to-end telecommunications ordering system, its authors defined a much more limited scope:

Network Management Forum (NMF) has defined a set of basic business processes dealing with major TMN service management functions such as performance management, fault management, billing and service provision. In addition to these, a service ordering process is defined as an important interaction with end customers requiring services. The service order process provides an integration point for all major TMN functions and business processes.

**This paper represents an overview analysis for the service ordering process including process definition, object modeling and process interaction.**

Chen, page 1, lines 1-8. Emphasis added by bolding.

Applicant submits that the broad reading of the Chen reference evident in the rationale presented to support the rejection of the examined claims is inconsistent with Chen's stated scope and amounts to the kind of hindsight reasoning that the courts have universally rejected. The rationale proffered to support the rejection of the examined claims is replete with references to "inferences" that were drawn from the description of Chen only in light of the present invention. This is the kind of hindsight reasoning that is **not** permissible. (See, MPEP §2141 III (8<sup>th</sup> Ed., Rev. 1)). When viewing the prior art at the time the invention was made it is clear that one skilled in the art would read Chen, with its confessed limited scope, as **not** encompassing the system of the present invention.

### **C. Obviousness Rejections**

The limitations of claim 1, as examined, are set forth below. Note that applicant has amended claim 1 to reinstate limitations inadvertently removed by amendment. The limitations have been labeled for ease of reference using the labeling scheme of the office action:

1. A system for supporting the management of an integrated communications provider (ICP), said system comprising:

- [a] a computer processor means for inputting and processing information necessary to the management of an ICP;
- [b] wherein the computer processor further comprises a graphical user interface for displaying information or data entry prompting requests to a human operator;
- [c] a pre-order management component comprising instructions for retrieving customer service records from telecommunication service providers and parsing said customer service records into reports containing equivalent ICP services;
- [d] a gateway for transferring information to and receiving information from telecommunication service providers;
- [e] a circuit management component comprising instructions for creating a hierarchal list comprising ICP on-net circuit assignments and off-net circuit assignments;
- [f] wherein said circuit management component further comprises instructions for creating a cutover work plan;
- [g] wherein said circuit management component further comprises an automatic means of receiving requests from trading partners of the ICP;
- [h] wherein said requests from trading partners are either rejected or inserted into said hierarchal list;
- [i] a design management component comprising instructions for automatically selecting a communications service model;
- [j] decomposing said service model into sub-model components and creating a communications design therefrom; and
- [k] wherein said design management component further comprises instructions for automatically issuing service requests to ICP trading partners.

**1. Claim 1 - Preamble**

The Chen reference is entitled "SP-to-SP Service Ordering Specification and Its Implementation." While the examiner repeatedly sites Chen as disclosing an end-to-end telecommunications ordering system, its authors defined a much more limited scope:

Network Management Forum (NMF) has defined a set of basic business processes dealing with major TMN service management functions such as performance management, fault management, billing and service provision. In addition to these, a service ordering process is defined as an important interaction with end customers requiring services. The service order process provides an integration point for all major TMN functions and business processes.

**This paper represents an overview analysis for the service ordering process including process definition, object modeling and process interaction.**

Chen, page 1, lines 1-8. Emphasis added by bolding.

Chen does not discuss, teach, or disclose in any significant way performance management, fault management, billing and service provision in a TMN environment. Chen, by its own terms, is focused on the service ordering process.

## **2. Claim 1 - Pre-Order Management Limitation**

Claim 1, as amended, recites the limitation:

[c] a pre-order management component comprising instructions for retrieving customer service records from telecommunication service providers and parsing said customer service records into reports containing equivalent ICP services;

As illustrated in Figure 2 of Chen, a customer orders telecommunication services from a service provider via a customer-to-SP interface and a service provider orders services from another service provider through an SP-to-SP interface. Chen makes a point that the interfaces are same. Thus, a service provider may be a “provider” and a “customer.” Chen recognizes that service is acquired in two stages: a pre-order phase and an ordering phase. Figure 3 of Chen illustrates the various objects within the SP-to-SP service-ordering model. On page 83 of Chen, a Request for Service (RFS) class is defined as representing a pre-order request issued by a main service provider (MSP) to a subcontracted service provider (SSP). A Service Offer Class is defined as a service offer made by an SSP to an MSP in response to the MSP’s pre-order request.

Figures 4 and 5 of Chen illustrate a service pre-ordering request, a service negotiation process, and a service ordering process. According to Chen, “One is for the service pre-order and service feature negotiation, the other is for service ordering. These interfaces are the only visible information exchange between two engaging SPs.” Chen, page 84, lines 2-4. The Chen process begins with the issuance of a pre-order request from an MSP to an SSP. The SSP responds with a service offer, which is then negotiated by the MSP and the SSP. The customer is first involved in the transaction when the customer places an order with the MSP as illustrated in Figure 5 of Chen.

Figure 6 and the text beginning at page 86 of Chen describe an ordering scenario in which a customer requests a service. “A customer connects to an MSP, which in turn connects to a number of SSPs to enable the ordering of a subcontracted part of the requested service. This extended service ordering is transparent to the Customer and offers a unique contact point for the service. This scenario results in there being a number of messages being supplied to the

customer by the MSP such as, a Proposal, an SLA, an Offer, etc.” Chen, page 86, line 15 through page 87, line 2. The discussion relating to Figure 7 also makes reference to the request for service:

When a Client starts, it contacts the Trader. The Client submits a service information request to the Trader (2) and is supplied with all of the service information currently held by the Trader....The Client presents the trader supplied services information to the Customer for a service selection. The Customer selects a service and the Client connects (3) to the selected SP Server (SPS). Chen, page 87, lines 22-28.

What Chen describes is a system for presenting a menu of available services to a customer (pre-order), having the customer select from the menu (order), and fulfilling the order (service). The pre-order processing described by Chen is limited to the exchange by SPs (with each other or through a trader) of a list of services provided by that SP. (“The interface operations for the ordering phase provide operations for an MSP to make pre-order requests for services.” Chen, page 82, lines 19-21.) Chen contemplates that a customer will request or select a service from an MSP. The MSP (or the Trader) receives the service offerings of the various SSPs in list form. Chen does not teach or disclose an MSP designing a service for a customer based on knowledge of that customer’s current service subscriptions.

In contrast, limitation [c] of claim 1 of the present invention recites “a pre-order management component comprising instructions for retrieving customer service records from telecommunication service providers and parsing said customer service records into reports containing equivalent ICP services.” The pre-sales activities of the pre-order management component of the present invention are thus customer-facing. As stated in the specification:

The present invention comprises a system useful to integrated communications providers (ICPs) and resellers of ICP services for providing sales proposals based upon customer service records. Specification, page 6, lines 14-17.

In contrast to the claimed invention, in Chen the pre-sales activities of the MSP are SSP-facing:

This paper describes a design specification of the interface objects, which are used for SP-to-SP Service Ordering. Interface objects are defined for the pre-ordering phase and the ordering phase. The interface operations for the pre-ordering phase provide operations for an MSP to make pre-order requests for services. Chen, page 82, lines 18-20.

In this sense, the term “pre-order” is being used to described two separate and distinct activities.

In the present invention, pre-order activity describes the marketing activity of an ICP to produce a service offer tailored to a customer based on the customer’s service record.

In Chen, pre-order activity describes the negotiation between an MSP and a SSP for services that can be resold to by the MSP to customers. Additionally, in Chen, pre-order activity takes the form of a “request.” (In addition to the quoted language above, see Chen, page 81, line 14; page 83, line 10, 18, 19-20, Figure 4, and Figure A.)

In the present invention, the pre-order activity focuses on retrieval of a customer service record from a third party. No request from the subscriber is made.

The examiner directed Applicant to the “customer record” depicted in Figure 6 as being held by the MSP and the “customer profile” depicted in Figure A as teaching the acquisition of the customer service record. Parsing the customer service record as recited in limitation [C] of claim 1 was found by the examiner in the statement: “When messages and data from the client are received by the SPC, the SPC delegates to the various internal subprocesses.” Chen, page 88, lines 15-16. The examiner notes that the billing function referred to in the Abstract requires “parsing” of records. As discussed above, this reference to billing is in the context of describing what is **not** dealt with in the Chen reference.

The examiner’s argument in applying Chen appears to be that, because Chen references billing (two instances), provides for the delegation of data to sub-processes (one instance), and references pre-order requests, it follows that Chen discloses acquiring a customer service record, parsing the record, and creating a report containing equivalent ICP services. Applicant respectfully submits that one unaware of Applicant’s disclosure would not divine such a process from the scant disclosures of the Chen reference.

Additionally, Chen does not describe what comprises the customer profile, what it is used for, and how it is generated. The customer record depicted in Figure 6 is held by the MSP and, by implication, was generated by the MSP and is not the customer service record retrieved “from telecommunication service providers” in accordance with limitation [c] of claim 1.

As to parsing, it is respectfully suggested that the examiner has misunderstood Applicant's remarks. All computer based messaging systems perform parsing functions to route tasks to various subsystems for processing. Limitation [c] of claim 1 is not directed to parsing computer instructions but to parsing a record of unknown format to obtain information useful in producing reports. Thus, this limitation is reciting an operation not specifically taught or disclosed by Chen.

Chen does not describe a billing function. Even assuming that a billing comprises a combination of various transactions, it cannot be assumed or inferred that a billing function can perform the task of preparing the reports described by the present invention. The term "report" as used in the present invention encompasses more than a mere bill:

The Pre-order management component, receives the CSR then parses it at 202 into recognizable codes and prepares as summary reports: CSR summary 203a, Account summary 203b, Broadband network summary 203c, consolidated reports 203d and cut-over report 203e. The consolidated reports feature combines the summaries from multiple customer locations. Specification, page 23, lines 9-13.

Applicant respectfully submits that it is inappropriate to use the very broad descriptions in Chen and then infer from them the specific functionality of the present invention, and to then apply the result to the very specific limitations of the present application. Without the benefit of the disclosure of the present invention, Chen would not have been read at the time of the invention to teach "retrieving customer service records from telecommunication service providers and parsing said customer service records into reports containing equivalent ICP services." It is submitted that this is the application of hindsight reasoning that is not permitted by the MPEP or the courts.

Since the combination of Chen and Sadafi does not teach the limitation, "a pre-order management component comprising instructions for retrieving customer service records from telecommunication service providers and parsing said customer service records into reports containing equivalent ICP services," of claim 1 (as amended), claim 1 (as amended) comprises a limitation not taught by the combination of Chen and Safadi. For this reason, a prima facie case of obviousness has not been established with respect to claim 1, and claim 1 is patentable over Chen in view of Safadi.



**3. Claim 1 - Circuit Management Component Limitation**

Claim 1 (as amended) of the present invention recites the following limitation (letters in brackets corresponding to the examiner's notation have been added for ease of reference):

[e] a circuit management component comprising instructions for creating a hierarchal list comprising ICP on-net circuit assignments and off-net circuit assignments;

[f] wherein said circuit management component further comprises instructions for creating a cutover work plan;

[g] wherein said circuit management component further comprises an automatic means of receiving requests from trading partners of the ICP;

[h] wherein said requests from trading partners are either rejected or inserted into said hierarchal list;

Regarding limitation [e], the examiner appears to quote language from the Chen reference (see, Office Action, page 6, paragraph e, beginning at line 5). However, Applicant could not identify the actual source of the quote. Applicant respectfully request that the source of this language be clarified.

As noted in the specification:

The ICP may own some pieces required to service the customer, such as a local switch, while they may lease others, such as the local loop. Finally, they may need to resell certain parts of a convergent order, such as a cable or wireless portion, from wholesalers or other trading partners. Components owned by the ICP are termed "on-net," while leased components or resold services are termed "off-net." Application, page 5, line 23 through page 6, line 5.

At page 87 of Chen, lines 9-10, Chen discusses the "granularity" of the services that appear at the interfaces, but does not describe instructions for creating a listing of the ICP's on-net and off-net circuit assignments.

The examiner further cites Figures 4 and 5 of Chen as teaching a "creating" function that a user would use to enter or create information relating to "on-net" components and "off-net" components in hierarchical file or list format. The creating function is said to disclose the instructions for creating the cutover work plan identified in limitation [f] of claim 1. However, the "create" statements illustrated in Chen do not refer to functionality that is accessible to the user at the user interface. Rather, Figures 4 and 5 of Chen illustrate the creation of internal

objects defined in Figure 3. Chen describes its object model as “stateless” and notes that “the message diagram triggers the creation/deletion of the objects and the change of states of the objects.” The cited Figures do not teach a “creating” function that can be used to implement the limitations [e], [f], and [j] of claim 1.

#### **4. Claim 1 - Design Management Component Limitation**

Claim 1 (as amended) of the present invention recites the following limitation (letters in brackets corresponding to the examiner’s notation have been added for ease of reference):

[i] a design management component comprising instructions for automatically selecting a communications service model;

[j] decomposing said service model into sub-model components and creating a communications design therefrom; and

[k] wherein said design management component further comprises instructions for automatically issuing service requests to ICP trading partners..

The examiner combines the reference to “the software” (Chen, Page 87, line 13) and the statement, “The design principle of this specification is to encourage interworking between different SPs, and avoid over-specifying behaviours,” (Chen, page 85, lines 6-7) to infer the teaching of a program module for automatically selecting a communications service model. Applicant submits that the goal of encouraging interworking between different SPs is desirable, but that the cited sections of the Chen reference do not teach or suggest any enabled means for accomplishing the stated goal. The “software” discussed in Chen is software that defines the interface between the customer to SP and the interface between the SP and the SP. Chen observes that treating the customer-SP relationship as an instance of the SP-SP relationship “is very useful for increasing the software reuse and operability.” This is not a disclosure that teaches instructions for creating a cutover work plan, instructions for automatically selecting a communications service model, or instructions for automatically issuing service requests to ICP trading partners.

The examiner found that Chen taught “decomposition of the service model into sub-model components and creating a communications design from the sub-model components” based largely on the disclosure in Chen that “when data from the client are received by the SPC, the SPC delegates to the various internal sub-processes.” Chen, page 88, lines 15-17. Even

assuming that Chen taught the selection of a communication service model, the fact that Chen parses messages received by a client simply does not teach decomposing a service model into sub-model components and creating a communications design therefrom.

**D. Claims 2, 9, and 18**

Claim 2 depends from claim 1 and incorporates all of the limitations of claim 1. Claim 9 depends from claim 8, and incorporates all the limitations of claim 8. Claim 18 depends from claim 15 and incorporates all of the limitations of claim 15. Applicant has demonstrated that claim 1 (as amended), claim 8, and claim 15 are patentable over Chen and Safadi. Accordingly, claims 2, 9, and 18 are patentable over Chen and Safadi.

**E. Claims 3, 10, and 19**

Claim 3 depends from claim 1 and incorporates all of the limitations of claim 1. Claim 10 depends from claim 8, and incorporates all the limitations of claim 8. Claim 19 depends from claim 15 and incorporates all of the limitations of claim 15. Applicant has demonstrated that claim 1 (as amended), claim 8, and claim 15 are patentable over Chen and Safadi. Accordingly, claims 3, 10, and 19 are patentable over Chen and Safadi.

**F. Claims 4, 11, and 20**

Claims 4, 11, and 20 (as amended), recite the additional limitation, “wherein the gateway comprises instructions for validation checking of transmissions in conformance with local service ordering guidelines and access service ordering guidelines established by telecommunication service providers.”

The examiner acknowledged that claims 4, 11, and 20 did not teach a validation check. The examiner cited Safadi for disclosing this limitation:

The L1G 20 performs the following functions: VIU authentication....Safadi, Col. 5, lines 36 and 38.

Applicant reiterates that Safadi is non-analogous art and is not properly combined with the Chen reference. Even if Safadi were found to be analogous art, Applicant submits that it is not directed to “validation checking of transmissions” as recited by the examined claims 4, 11, and 20 as amended. The authentication of the VIU in Safadi arises in the context of a cable

network architecture:

The specific components which comprise the network architecture of the present invention will now be presented in detail. The video information provider (VIP) 12 consists of a level two gateway (L2G) and associated servers. The L2G acts as an interface between the VIP 12 and the network 10. The VIPs 12 are the source of live, archival broadcast or interactive service content, (comprising electronic encyclopedias, electronic catalogs, downloadable applications, movies, etc.), communications with the network 10, and service menus. The L2G communicates with the L1G 20 to manage the establishment and termination of service/session connections between the VIUs and the VIPs 12. The L2G also provides menu presentation and selection processing to and from the VIUs, performs VIU authentication and forwards billing information, for VIP 12 provided services to the billing system 26.

The level 1 gateway (L1G) 20 provides overall management of network 10 in support of service delivery from a VIP to a VIU(s). The L1G 20 performs the following functions: 1) management of VIP-VIU interactive sessions through communication with the VIPs 12; 2) VIU authentication and collection of billing information relating to network 10 support of VIP 12/L1G 20 provided services for forwarding to the billing system 26; 3) interactive menu presentation which is responsive to the service selected; and 4) database management of VIU profiles for digital broadcast and interactive services.

Authentication of the video information user (VIU) is performed at both the level one and level two gateways. As amended, claims 4, 11, and 20 are directed to the validation of transmissions, not users.

Additionally, Claim 10 depends from claim 8, and incorporates all the limitations of claim 8. Claim 19 depends from claim 15 and incorporates all of the limitations of claim 15. Applicant has demonstrated that claim 1 (as amended), claim 8, and claim 15 are patentable over Chen and Safadi. Accordingly, claims 3, 10, and 19 are patentable over Chen and Safadi.

G. Claims 5, 12, and 21

Claims 5, 12, and 21 (as amended) recite the additional limitation, "wherein the design management component further comprises an optimizing algorithm adapted to determine the origin of supply of the sub-model components." The examiner found that an algorithm was taught by the following disclosures from the Chen reference:

Page 82, line 18: This paper describes a design specification of the interface objects which are used for SP-to-SP Service Ordering," and page 85, lines 6-7: "The design principle of this specification is to encourage networking between different SPs,

and avoid over-specifying internal system behaviors,” read with page 87, line 13: “customer-SP relationship as an instance of SP-to-SP relationship is very useful for increasing the software reuse and...”

The examiner also concluded that optimization “is the basic requisite of a program or algorithm” and is thus inherent. (Office Action, page 11.)

The cited disclosures provide a general description of the content of the paper and identify one of the objectives of the paper as avoiding “over-specifying system behaviors.” However, nothing in these references teaches an algorithm of any kind. Since Chen shows no algorithm, it is inappropriate to infer its characteristics.

In the present invention, the algorithm:

determines the origin of supply of the various sub-model components. Optimizing criteria include cost factors, availability, quality of service requested, on-net vs. off-net services, recurring vs. non-recurring services and trading partner preferences. For example, one network may be optimized for quality of service, another network optimized for lowest cost to the ICP and another network optimized to meet trading partner sales quotas. As a result, the optimizing algorithm provides the important link between ICP management objectives and resulting network design. Specification, page 21, lines 9-15.

Chen clearly does disclose this functionality. Additionally, Applicant respectfully disagrees with the conclusion that all algorithms are inherently directed to optimization. In the embodiment described in the quoted text, the algorithm of the present invention uses specified factors to find an optimized result. These factors are neither taught nor disclosed by Chen.

Applicant submits that the cited disclosures from Chen do not disclose or teach the compiling reports from multiple customer locations into a single consolidated report and that claim 5, 12, and 21 (as amended) are thus allowable over Chen and Safadi.

In addition, claim 5 (as amended) depends from claim 1 (as amended), and incorporates all of the limitations of claim 1 (as amended). Claim 12 (as amended) depends from claim 8, and incorporates all the limitations of claim 8. Claim 21 (as amended) depends from claim 15 and incorporates all of the limitations of claim 15. Applicant has demonstrated that claim 1 (as amended), claim 8, and claim 15 are patentable over Chen and Safadi. Accordingly, claims 5, 12, and 21 (as amended) are patentable over Chen and Safadi.

H. Claims 6, 13, and 22

Claim 6 depends from claim 1 and incorporates all of the limitations of claim 1 (as amended). Claim 13 depends from claim 8, and incorporates all the limitations of claim 8. Claim 22 depends from claim 15 and incorporates all of the limitations of claim 15. Applicant has demonstrated that claim 1 (as amended), claim 8, and claim 15 are patentable over Chen and Safadi. Accordingly, claims 6, 13, and 22 are patentable over Chen and Safadi.

**I. Claims 7, 14, and 23**

Claim 7 depends from claim 1 (as amended), and incorporates all of the limitations of claim 1 (as amended). Claim 14 depends from claim 8, and incorporates all the limitations of claim 8. Claim 23 depends from claim 15 and incorporates all of the limitations of claim 15. Applicant has demonstrated that claim 1 (as amended), claim 8, and claim 15 are patentable over Chen and Safadi. Accordingly, claims 7, 14, and 23 are patentable over Chen and Safadi.

**J. Claim 8**

Claim 8 of the present invention has been rejected under 35 U.S.C. §103(a) as being unpatentable over Chen in view Safadi. Claim 8 recites the following limitations (letters in brackets corresponding to the examiner's notation have been added for ease of reference):

8. A system for managing sales proposals of an integrated communications provider (ICP), said system comprising:

[a] a computer processor means for inputting and processing information necessary to the management of an ICP;

[b] a gateway for transferring information to and receiving information from telecommunication service providers;

[c] a pre-order management component comprising instructions for retrieving customer service records from telecommunication service providers and parsing said customer service records into reports containing equivalent ICP services;

[d] a design management component comprising instructions for selecting a communications service model;

[e] decomposing said service model into sub-model components and creating a communication services sales proposal therefrom;

[f] wherein subsequent versions of said sales proposal are automatically created subsequent to a request from a human operator for alternate communication service models;

[g] wherein said design management component further comprises instructions for automatically issuing service requests to ICP trading partners;

[h] wherein such requests to ICP trading partners comprise requests for local service request, assignment of telephone number request, assignment of Internet protocol address, and requests for data broadband services;

[i] wherein said design management component further comprises instructions for creating cutover reports subsequent to acceptance of a sales proposal by a customer;

[j] a service management component comprising instructions for creating and tracking work plans;

[k] wherein said work plans comprise a work activity event for performing installation or troubleshooting of each sub-model component of a telecommunications service provided by the ICP to a customer and;

[l] a circuit management component comprising instructions for creating a hierarchal list of ICP on-net and off-net circuit assignments.

As to limitation [a] of claim 8, the examiner has rejected this limitation on the same grounds as limitation [a] of claim 1. Applicant reiterates its arguments directed to limitation [a] of claim 1 and submits that for the reasons previously stated this limitation is not taught by the combination of Chen and Safadi.

As to limitation [c] of claim 8, the examiner has rejected this limitation on the same grounds as limitation [c] of claim 1. Applicant reiterates its arguments directed to limitation [c] of claim 1 and submits that for the reasons previously stated this limitation is not taught by the combination of Chen and Safadi.

As to limitation [d] of claim 8, the examiner has rejected this limitation on the same grounds as limitation [i] of claim 1. Applicant reiterates its arguments directed to limitation [a] of claim 1 and submits that for the reasons previously stated this limitation is not taught by the combination of Chen and Safadi.

As to limitation [e] of claim 8, the examiner has rejected this limitation on the same grounds as limitation [j] of claim 1. Applicant reiterates its arguments directed to limitation [j] of claim 1 and submits that for the reasons previously stated this limitation is not taught by the combination of Chen and Safadi.

As to limitation [f], the examiner found that Chen taught the limitation that "subsequent versions of said sales proposal are automatically created subsequent to a request from a human operator for alternate communication service models" based on citations to Chen page 80, line 8;

page 81, lines 7-9 read with page 81, lines 7-18, and page 87, line 2. The examiner equated the “modeling” and “automating” terms used by Chen with creating of a subsequent version of a sales proposal and cited page 81, lines 12-13 (word “negotiating”) as suggesting a request from a human operator. Again, the cited language is taken out of context. On page 80, at line 8, Chen is describing object modeling in the context of a transaction interface, not the modeling of communication services to be offered to a customer. On page 81, modeling is again used to refer to the service ordering requirements of the Chen transactional interface. The reference to “negotiating” on page 81, lines 12-13 describes the exchange of information inherent in any transaction. However, describing a process by which offers are exchanged does not teach a process by which offers are created. Chen, Figure 4, page 84, for example, illustrates a negotiation “interaction” but does not suggest how the content involved in the negotiation was developed. For these reasons, Applicant submits that this limitation is not taught by the combination of Chen and Safadi.

As to limitation [g] of claim 8, the examiner has rejected this limitation on the same grounds as limitation [k] of claim 1. Applicant reiterates its arguments directed to limitation [k] of claim 1 and submits that for the reasons previously stated this limitation is not taught by the combination of Chen and Safadi.

As to limitation [h] of claim 8, the examiner found that Chen taught the limitation “wherein such requests to ICP trading partners comprise requests for local service requests, assignment of telephone number request, assignment of Internet protocol address, and requests for data broadband services” based on citations to Chen page 81, lines 31-33 read with page 87, line 9. Chen page 81, lines 31-33 recites:

When a customer requires a service, the customer contacts a service provider without knowing whether other service providers will be involved. The service provider makes contact with all the different server provides [sic] required in provision this service.

Chen page 87, line 9 recites:

At the C-SP interface we will have complicated packages of services (e.g., including Voice, data, web, etc.

The examiner found that these disclosures recited the limitation [h] of claim 8 because



“voice” infers a telephone number request from a local service provider, “web” infers a request for an IP address and data encompasses broadband service. However, the “requests” referred to in limitation [h] of claim 8 are “automatically” issued (see limitation [g]). A reasonable interpretation of the cited language of Chen is that the interface provides a mechanism for the service provider to manually contact each of the sub-service providers from whom the service provider acquires a service offering. Thus, Chen does not teach or disclose that the issuance of automated requests to trading partners. For these reasons, Applicant submits that this limitation is not taught by the combination of Chen and Safadi.

As to limitation [i] of claim 8, the examiner has rejected this limitation on the same grounds as limitations [c], [f], [g] of claim 1. Applicant reiterates its arguments directed to limitations [c], [f], [g] of claim 1 and submits that for the reasons previously stated this limitation is not taught by the combination of Chen and Safadi. As to limitation [j] of claim 8, the examiner found that Chen taught the limitation “a service management component comprising instructions” based on citations to Chen Figure 3, page 83, lines 1-23, page 86, lines 8-10, and the limitation “for creating and tracking work plans” based on citations to Chen, page 86, line 3, page 87, line 3, and page 81 line 14. Additionally, as to limitation [k], the examiner found that Chen taught the limitation “wherein said work plans comprise a work activity event for performing installation or troubleshooting” based on citations to Chen, page 80, lines 1-3, and page 87, lines 9-10, and taught the limitation, “of each sub-model component of a telecommunications service provided by the ICP to a customer,” based on citations to Chen Figure 2 and Chen page 82, lines 7-14.

Chen Figure 3 and the text appearing at Chen page 83, lines 1-23 relate to a description of a SP-to-SP ordering object model by describing the interface objects and their relationships to each other. The cited text on Chen page 86 relates to a discussion to a demonstration implementation of an ordering process written in Java. The examiner found that the cited text and figure “clearly infer the presence or availability of some program module or component for handling services {service management component} and a program or computer program is basically composed of action statements or codes or instructions.” (Office Action, page 14.)

While the demonstration program is clearly software based, it does not follow that the software described by Chen comprises the “service management component” limitation of the

claimed invention. As is clear from reading claim 8 as a whole, service management does not refer to service ordering, but to installation and maintenance of installed services. Service management functions occur after the ordering process has been completed. Chen, in its own stated limitations, is focusing on ordering, not implementation.

Chen page 87, line 3, reads, "Workflow is shown here to illustrate the monitoring of the stages associated with the service provisioning process." While the examiner cites this text to support the inference of the presence of service management software, the context in which the text appears suggests otherwise. "Workflow" refers to the process and control tasks assigned by the SP server to individual threads (see Chen, page 86, line 11). Indeed, Chen page 87, line 4, defines the workflow as "the coordinator of all internal tasks proceeded by a service provider to support the Ordering activity." Workflow, in the context of Chen, refers to ordering lifecycle for services for a particular client. Once the ordering process is completed, the "workflow" disclosed in Chen is completed.

In contrast, the claimed invention provides that the "work plans comprise a work activity event for performing installation or troubleshooting." The examiner cites Chen page 80, line 1-3 to conclude "wherein cited 'service management' and 'fault management' indicating references teaching of a service provisioning including installation services, fault or trouble detecting..." functionality. While the cited text of Chen makes reference to the terms service management and fault management, the context of the statement is informational, not descriptive:

Network Management Forum (NMF) has defined a set of basic business processes dealing with major TMN **service management** functions such as performance management, **fault management**, billing and service provisioning. In addition to these, a service ordering process is defined as an important interaction with the end customers requiring services....This paper presents an overview analysis for the service ordering process including the process definition, object modeling and process interaction. Chen, page 80, lines 1-8. (Emphasis added by bolding.)

Chen does not disclose or teach an enabled service management function comprising instructions for creating and tracking work plans as claimed in limitations [j] and [k] of claim 8 of the present invention. For these reasons, Applicant submits that limitations [j] and [k] are not taught by the combination of Chen and Safadi.

As to limitation [l] of claim 8, the examiner has rejected this limitation on the same grounds as limitation [e] of claim 1. Applicant reiterates its arguments directed to limitation [e]

of claim 1 and submits that for the reasons previously stated this limitation is not taught by the combination of Chen and Safadi.

**K. Claim 15**

Claim 15 of the present invention has been rejected under 35 U.S.C. §103(a) as being unpatentable over Chen in view of Safadi. Claim 8 recites the following limitations (letters in brackets corresponding to the examiner's notation have been added for ease of reference):

15. A system for managing sales proposals of an integrated communications provider (ICP), comprising:

[a] a computer processor means for inputting and processing information necessary to the management of an ICP;

[b] a gateway for transferring information to and receiving information from telecommunication service providers;

[c] a pre-order management component comprising instructions for retrieving customer service records from telecommunication service providers and parsing said customer service records into reports containing equivalent ICP services;

[d] a design management component comprising instructions for selecting a communications service model;

[e] decomposing said service model into sub-model components and creating a communication services sales proposal therefrom;

[f] wherein subsequent versions of said sales proposal are automatically created subsequent to a request from a human operator for alternate communication service models.

As to limitation [a] of claim 15, the examiner has rejected this limitation on the same grounds as limitation [a] of claim 8. Applicant reiterates its arguments directed to limitation [a] of claim 8 and submits that for the reasons previously stated this limitation is not taught by the combination of Chen and Safadi.

As to limitation [b] of claim 15, the examiner has rejected this limitation on the same grounds as limitation [b] of claim 8. Applicant reiterates its arguments directed to limitation [b] of claim 8 and submits that for the reasons previously stated this limitation is not taught by the combination of Chen and Safadi.

As to limitation [c] of claim 15, the examiner has rejected this limitation on the same grounds as limitation [c] of claim 8. Applicant reiterates its arguments directed to limitation [c]

of claim 8 and submits that for the reasons previously stated this limitation is not taught by the combination of Chen and Safadi.

As to limitation [d] of claim 15, the examiner has rejected this limitation on the same grounds as limitation [d] of claim 8. Applicant reiterates its arguments directed to limitation [8] of claim 8 and submits that for the reasons previously stated this limitation is not taught by the combination of Chen and Safadi.

As to limitation [e] of claim 15, the examiner has rejected this limitation on the same grounds as limitation [e] of claim 8. Applicant reiterates its arguments directed to limitation [a] of claim 1 and submits that for the reasons previously stated this limitation is not taught by the combination of Chen and Safadi.

As to limitation [f] of claim 15, the examiner has rejected this limitation on the same grounds as limitation [f] of claim 8. Applicant reiterates its arguments directed to limitation [f] of claim 8 and submits that for the reasons previously stated this limitation is not taught by the combination of Chen and Safadi. Based on the foregoing, a prima facie case of obviousness has not been established with respect to claim 15 and claim 15 is patentable over Chen in view of Safadi.

**L. Claim 16.**

Claim 16 (as amended) depends from claim 15 and recites the additional limitation, "wherein the design management component further comprises instructions for compiling reports from multiple customer locations into a single consolidated report." The examiner found this limitation taught by the following disclosures from the Chen reference:

Page 82, line 18: "This paper describes a design specification of the interface objects which are used for SP-to-SP Service Ordering," recited with page 87, lines 1-2: This scenario results in there being a number of messages being supplied to the Customer by the MSP, such as, a Proposal, an SLA, or Offer, etc."

Reference to "billing" page 83, line 17.

According to the examiner, the billing function "would be used to combine {consolidate} various proposals into a single one, as will be appreciated that bill is a combined statement of various transactions and other data." (Office Action, page 16.)

Chen does not describe a billing function. Even assuming that a billing comprises a combination of various transactions, it cannot be assumed or inferred that a billing function can perform the task of compiling reports from different locations. The term "report" as used in the present invention encompasses more than a mere bill:

The Pre-order management component, receives the CSR then parses it at 202 into recognizable codes and prepares as summary reports: CSR summary 203a, Account summary 203b, Broadband network summary 203c, consolidated reports 203d and cut-over report 203e. The consolidated reports feature combines the summaries from multiple customer locations. Specification, page 23, lines 9-13.

Applicant submits that the cited disclosures from Chen do not disclose or teach compiling reports from multiple customer locations into a single consolidated report and that Claim 16 (as amended) is thus allowable over Chen and Safadi.

**M. Claim 17.**

Claim 17 depends from claim 15 and recites the additional limitation, "wherein the created sales proposals comprise a comparison between existing communication services and ICP provided services."

The examiner found the additional limitation of claim 17 in the Chen reference as follows: :

Page 87, lines 1-2: This scenario results in there being a number of messages being supplied to the Customer by the MSP, such as, a Proposal, an SLA, or Offer, etc.," read with page 81, lines 12-13: Support for negotiation - in a competitive environment server orders generally come out of a discussion, comparing different alternatives, with the customer."

Clearly, Chen is describing a manual process in which the customer and the service provider interact to arrive at a service order. Such discussions may or may not yield the best alternatives as is subject to human interactions that may be affected by any number of factors. In contrast, the present invention automates the comparison of the existing service of a customer with the services offered by the ICP as follows:

The system incorporates features that automate comparisons between existing services and proposal services, alarming of failures of confirmations, optimizing on-net and off-net services, creation of cutover reports and issuance of service requests to local exchange carriers and trading partners. Up to now, the CSR has been printed then manually compared to an ICP's service offerings. This

manual process is labor intensive and prone to errors. As a result, a method of automating the sales proposal function based on CSR is needed.

Once a customer accepts a sales proposal for ICP services, it must be provisioned and appropriate request for service orders issued to ILECs. Presently these requests are manually originated. By automating the activation and provisioning process, ICPs will be able to significantly reduce the overhead that is associated with manual provisioning processes. Additionally, the error rate associated with manual activation will be reduced significantly as well. Specification, page 4, line 15 through page 5, line 3.

And

Similarly, sales proposals are automatically generated at 205 and displayed to the user at 206. Sales proposals are generated by selecting from a database of ICP services comparable to CSR reported services. The generated sales proposals preferably compare features and costs of ICP provided services in comparison to existing customer received services. Specification, page 16, lines 7-11.

Applicant submits that the cited disclosures from Chen do not disclose or teach the compiling reports from multiple customer locations into a single consolidated report and that Claim 17 is thus allowable over Chen and Safadi.

### CONCLUSION

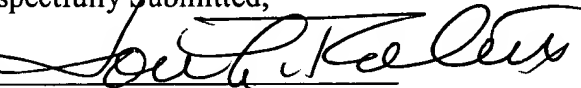
Applicant submits that if the Chen reference is read in context for what it teaches, Chen in combination with Safadi does not support the establishment of a prima facie case of obviousness with respect to claims 1-23 of the present invention. Chen's broad references to functionality can only be given life by the specific embodiments and functionality of the present invention that involves the impermissible application of hindsight. Applicant submits that Safadi is non-analogous art, that there is no motivation to combine these references aside from the teachings of Applicant's disclosure and that combining these references is an impermissible exercise in hindsight. One skilled in the art attempting to solve the problem faced by Applicant would not have been motivated to combine Chen and Safadi. Even if combined, the references fail to teach all of the limitations of the pending claims.

In view of the above information and remarks, Applicant respectfully requests reconsideration of the current rejections. Applicant submits that based on the foregoing, claims 1-23 in their present form are allowable over the cited prior art. Applicant further requests that a

timely Notice of Allowance be issued in this case.

Should any further questions arise concerning this application or in the event the above amendments do not place the application in condition for allowance, Applicant respectfully requests an interview with the examiner and the examiner's supervisor prior to any new office action relating to the present Application. Attorney for the Applicant may be reached at the number listed below.

Respectfully Submitted,

By 

Jon L. Roberts  
Registration No. 31293  
Elliott D. Light, Esq.  
Registration No. 51,948  
Roberts Abokhair & Mardula, LLC  
11800 Sunrise Valley Drive, Suite 1000  
Reston, VA 20191  
703-391-2900